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Gaskets shall conform to ASTM Specification C-564.

(c) Polyvinyl Chloride (PVC) Pipe - Heavy Wall

Pipe shall be made from Class 12454-B materials or better in accordance with ANSI/ASTM Specification D-1784.

Pipe and accessories shall conform to the requirements of the following, with a minimum pipe stiffness of 46 PSI at a maximum deflection of five percent (5%).

ANSI/ASTM D 3034 (4" - 15")  
ASTM F 679 Type I (18" - 27")

(d) Ductile Iron Pipe

Pipe, fittings, and specials shall be manufactured in accordance with ASTM Specification A-746. Pipe shall have a minimum thickness of Class 50. Fittings shall conform to ANSI Specification A-21.11 and have a minimum pressure class rating of 150 PSI.

All pipe and fittings shall be cement mortar lined in accordance with ANSI Specification A-21.4 at twice the specified thickness, and have an internal and external bituminous seal coating.

Closure pieces shall be jointed by means of a mechanical coupling of the cast sleeve type.

(e) Vitrified Clay Pipe - Extra strength

(Note that standard strength vitrified clay pipe shall not be used.)

Pipe shall conform to the current requirements of NCPI Specification ER 3300-67 and meet the requirements of ASTM Specification C 700.

(f) Acrylonitrile-Butadiene-Styrene (ABS) Pipe

Pipe and fittings shall conform to the requirements of ASTM Specification D 2661.

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(g) Other pipe materials

Other pipematerials require prior written approval of the Superintendent before being installed.

(2) The minimum internal pipe diameter shall be 8 inches.

(3) Joints for the selected pipe shall be designed and manufactured such that "O" ring gaskets of the "snap-on" type are used.

(4) Gaskets shall be continuous, solid, natural or synthetic rubber, and shall provide a positive compression seal in the assembled joint, such that the requirements of Section 505 are met.

(5) Joint preparation and assembly shall be in accordance with the manufacturer's recommendations.

(6) Wye branch fittings shall be installed, for connection of street laterals, in accordance with Section 606.

Section 503 B - Safety and Load Factors

Selection of pipe class shall be predicated on the following criteria:

|                |   |                 |
|----------------|---|-----------------|
| Safety factor  | = | 1.5             |
| Load factor    | = | 1.7             |
| Weight of soil | = | 120 lbs/cu. ft. |
| Wheel loading  | = | 16,000 lbs.     |

Utilizing the foregoing information, design shall be made as outlined in Chapter IX of the Water Pollution Control Federation Manual of Practice No. 9, latest edition, "Design and Construction of Sanitary and Storm Sewers", and the pipe shall have sufficient structural strength to support all loads to be placed on the pipe, with a safety factor as specified above.

PVC pipe shall not be encased in concrete due to their different

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coefficients of linear thermal expansion.

Section 503 C - Sewer Pipe Installation

(1) Local utilities shall be contacted to verify construction plans and to make arrangements to disconnect all utility services, where required to undertake the construction work. The utility services shall later be reconnected. The work shall be scheduled so that there is minimum inconvenience to local residents. Residents shall be provided proper and timely notice regarding disconnection of utilities.

(2) The construction right-of-way shall be cleared only to the extent needed for construction. Clearing consists of removal of trees which interfere with construction, removal of underbrush, logs, and stumps, and other organic matter, removal of refuse, garbage, and trash, removal of ice and snow, and removal of telephone and power poles, and posts. Any tree which will not hinder construction shall not be removed, and shall be protected from damage by any construction equipment. Debris shall not be burned, but hauled for disposal in an approved manner.

(3) The public shall be protected from personal and property damage as a result of the construction work.

(4) Traffic shall be maintained at all times in accordance with applicable highway permits. Where no highway permits are required, at least 1/2 of a street shall be kept open for traffic flow.

(5) Erosion control shall be performed throughout the project to minimize the erosion of soils onto lands or into waters adjacent to or affected by the work. Erosion control can be effected by limiting the amount of clearing and grubbing prior to trenching, proper scheduling of the pipe installation work, minimizing time of open trench, prompt grading and seeding, and filtration of drainage.

(6) The trench shall be excavated only wide enough for proper installation of the sewer pipe, manhole, and appurtenances.

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Allowances may be made for sheeting, de-watering, and other similar actions to complete the work. Roads, sidewalks, and curbs shall be cut, by sawing, before trench excavation is initiated.

(7) Under ordinary conditions, excavation shall be by open cut from the ground surface. However, tunnelling or boring under structures other than buildings may be permitted. Such structures include crosswalks, curbs, gutters, pavements, trees, driveways, and railroad tracks.

(8) Open trenches shall be protected at all hours of the day with barricades, as required.

(9) Trenches shall not be open for more than 30 feet in advance of pipe installation nor left unfilled for more than 30 feet in the rear of the installed pipe, when the work is in progress, without permission of the Superintendent. When work is not in progress, including over night, weekends, and holidays, the trench shall be backfilled to ground surface.

(10) The trench shall be excavated approximately six (6) inches deeper than the final pipe grade. When unsuitable soils are encountered, these shall be excavated and replaced with select materials.

(11) Ledge rock, boulders, and large stones shall be removed from the trench sides and bottom. The trench shall be over-excavated at least 12 inches for five (5) feet, at the transition from rock bottom to earth bottom, centered on the transition.

(12) Maintenance of grade, elevation, and alignment shall be done by some suitable method or combination of methods.

(13) No structure shall be undercut unless specifically approved by the Superintendent.

(14) Proper devices shall be provided, and maintained operational at all times, to remove all water from the trench as it enters. At no time shall the sewer line be used for removal of water from the trench.

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- (15) To protect workers and to prevent caving, shoring and sheeting shall be used, as needed. Caving shall not be used to backfill the trench. Sheetting shall not be removed but cut off no lower than one foot above the pipe crown nor no higher than one foot below final grade, and left in the trench, during backfill operations.
- (16) The pipe barrel shall be supported, along its entire length, on a minimum of six (6) inches of crusher run max. 1/2 inch stone free of organic material. This foundation shall be firmly tamped in the excavation.
- (17) Bell holes shall be hand excavated, as appropriate.
- (18) Pipe shall be laid from low elevation to high elevation. The pipe bell shall be up-gradient; the pipe spigot shall be down-gradient.
- (19) The joints shall be made, and the grade and alignment checked and made correct.
- (20) The pipe shall be in straight alignment.
- (21) When a smaller sewer joins a larger one the invert of the larger sewer shall be lowered sufficiently to maintain the same hydraulic gradient. An approximate method which may be used for securing this result is to place the O.B. depth of both sewers at the same elevation.
- (22) Crushed stone shall be placed over the laid pipe to a depth of at least six (6) inches. The embedment of thermoplastic pipe shall be in accordance with ASTM D2321 using class 1A or 1B backfill materials. Care shall be exercised so that stone is packed under the pipe haunches. Care shall be exercised so that the pipe is not moved during placement of the crushed stone.
- (23) The migration of fines from surrounding backfill or native soils shall be restricted by gradation of embedment materials or by use of suitable filter fabric.

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(24) The remaining portion of the trench above the pipe embedment shall be backfilled in foot lifts which shall be firmly compacted. Compaction near/under roadways, driveways, sidewalks, and other structures shall be to 95 % of the maximum moisture-density relationship, as determined by ASTM Specification D 698, Method D. Ice, snow, or frozen material shall not be used for backfill.

Section 504 - Manholes and Manhole Installation

(1) Design of all manholes shall be submitted to the Superintendent and shall receive approval prior to placement.

(2) Manholes shall be placed where there is a change in slope or alignment, and at intervals not exceeding 400 linear feet.

(3) Manhole bases shall be constructed or placed on a minimum of six (6) inches of crusher run max. 1/2 inch stone free of organic materials.

(4) Manhole bases shall be constructed of 4,000 psi (28 day) concrete 8 inches thick, or shall be precast bases properly bedded in the excavation. Field constructed bases shall be monolithic, properly reinforced, and extend at least 6 inches beyond the outside walls of lower manhole sections. Precast manhole bases shall extend at least 6 inches beyond the outside walls of lower manhole sections.

(5) Manholes shall be constructed using precast minimum 4 foot diameter concrete manhole barrel sections, and an eccentric top section, conforming to ASTM Specification C-478, with the following exceptions on wall thickness:

| Manhole Diameter<br>Feet | Wall Thickness<br>Inches |
|--------------------------|--------------------------|
| 4                        | 5                        |
| 5                        | 6                        |
| 6                        | 7                        |
| 6-1/2                    | 7-1/2                    |
| 7                        | 8                        |
| 8                        | 9                        |

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All sections shall be cast solid, without lifting holes. Flat top slabs shall be a minimum of 8 inches thick and shall be capable of supporting a H-20 loading.

(6) All joints between sections shall be sealed with an "O" ring rubber gasket, meeting the same specifications as pipe joint gaskets, or butyl joint sealant completely filling the joint.

(7) All joints shall be sealed against infiltration. All metal parts shall be thickly coated with bitumastic or elastomeric compound to prevent corrosion.

(8) No steps or ladder rungs shall be installed in the inside or outside manhole walls at any time.

(9) No holes shall be cut into the manhole sections closer than 6 inches from joint surfaces.

(10) Manholes which extend above grade shall not have an eccentric top section. The top plate shall be large enough to accommodate the cover lifting device and the cover.

(ii) The elevation of the top section shall be such that the cover frame top elevation is 0.5 foot above the 100-year flood elevation (in a field), 0.5 foot above a lawn elevation, or at finished road or sidewalk grade.

(12) When located in a travelled area (road or sidewalk), the manhole frame and cover shall be heavy duty cast iron. When located in a lawn or in a field, the manhole frame and cover may be light duty cast iron. The cover shall be 36 inches in diameter. The minimum combined weight of the heavy duty frame and the cover shall be 735 +/- 5% lbs. The minimum combined weight of the light duty frame and the cover shall be 420 +/- 5% lbs. The mating surfaces shall be machined, and painted with tar pitch varnish. The cover shall not rock in the frame. Infiltration between the cover and frame shall be prevented by proper design and painting. Covers shall have "Sanitary Sewer" cast into them. Covers shall have lifting holes suitable for any lifting/jacking device. The lifting holes shall be designed so that infiltration is prevented.

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- (13) A drop of at least 0.1 foot shall be provided between incoming and outgoing sewers on all junction manholes and on manholes with bends greater than 45 degrees.
- (14) Inverts and shelves/benches shall be placed after testing the manholes and sewers.
- (15) Benches shall be level and slope to the flow channel at about 1 inch per foot.
- (16) The minimum depth of the flow channel shall be the nominal diameter of the smaller pipe. The channel shall have a steel trowel finish. The flow channel shall have a smooth curvature from inlet to outlet.
- (17) Manhole frames, installed at grade, shall be set in a full bed of mortar with no less than two nor more than four courses of brick underneath to allow for later elevation adjustment. In lieu of brick, grade rings may be used for elevation adjustment. Grade rings shall not exceed 6 inches in depth. The total number of grade rings shall not exceed 12 inches in height, however, in no event shall more than 3 grade rings be used.
- (18) Manholes which extend above grade, shall have the frames cast into the manhole top plate. The top plate shall be securely anchored to the manhole barrel, by a minimum of six 1/2 inch corrosion resistant anchor bolts, to prevent overturning when the cover is removed. The anchor bolts shall be electrically isolated from the manhole frame and cover.
- (19) Internal drop pipes and fittings shall be PVC plastic sewer pipe in compliance with ASTM D2241. Corrosion resistant anchors shall be used to attach the drop pipe to the inside surface of the manhole barrel.

Section 505 A - Infiltration/Exfiltration Testing

All sanitary sewers or extensions to sanitary sewers, including manholes, shall satisfy requirements of a final infiltration test

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before they will be approved and wastewater flow permitted by the Village of Carthage. The infiltration rate shall not exceed 25 gallons per 24 hours per mile per nominal diameter in inches. An exfiltration test may be substituted for the infiltration test; the same rate shall not be exceeded. The exfiltration test shall be performed by the applicant, under the supervision of the Superintendent, who shall have the responsibility for making proper and accurate measurements required. The exfiltration test consists of filling the pipe with water to provide a head of at least 5 feet above the top of the pipe or 5 feet above groundwater, whichever is higher, at the highest point under test, and then measuring the loss of water, from the pipe section under test, by the amount of water which must be added to maintain the original level. However, under no circumstances shall the head at the downstream manhole exceed ten (10) feet or fill to within six (6) inches of the top of the downstream manhole. Should this condition prevail, the testing methods in Sections 504 F and/or 504 G shall be utilized. In this test, the test section must remain filled with water for at least 24 hours prior to taking any measurements. Exfiltration shall be measured by the drop of water level in a standpipe with a closed bottom end, or in one of the sewer manholes serving the test section. When a standpipe and plug arrangement is used in the upper manhole in the test section, there shall be some positive method for releasing entrapped air prior to taking any measurements.

Section 505 B - Test Section

The test section shall be as ordered or as approved, but in no event longer than 1,000 feet. In the case of sewers laid on steep grades, the test length may be limited by the maximum allowable internal pressure on the pipe and joints at the lower end of the test section. For purposes of determining the leakage rate of the test section, manholes shall be considered as sections of 48-inch diameter pipe, 5 feet long. The maximum allowable leakage rate for such a section is 1.1 gallons per 24 hours. If leakage exceeds the allowable rate, then necessary repairs or replacements shall be made, and the section retested.

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Section 505 C - Test Period

The test period, during which the test measurements are taken, shall not be less than two (2) hours.

Section 505 D - Pipe Lamping

Prior to testing, the section shall be lamped. Any length of pipe out of straight alignment shall be realigned.

Section 505 E - Deflection Testing

Also prior to testing, all plastic pipe, in the test section, shall be tested for deflection. Deflection testing shall involve the pulling of a rigid ball or mandrel, whose diameter is 95 percent of the pipe inside diameter, through the pipe. Any length of pipe with a deflection greater than 5 percent shall be replaced. The test section shall be flushed just prior to deflection testing. The test shall not be performed with a mechanical pulling device.

Section 505 F - Low Pressure Air Testing Alternative

In lieu of hydrostatic testing (exfiltration or infiltration), low pressure air testing may be employed. Low pressure air tests shall conform to ASTM Specification C 828. All sections to be tested shall be cleaned and flushed, and shall have been backfilled, prior to testing. Air shall be added until the internal pressure of the test section is raised to approximately 4.0 PSIG. The air pressure test shall be based on the time, measured in seconds, for the air pressure to drop from 3.5 PSIG to 2.5 PSIG.

Acceptance is based on limits tabulated in the "Specification Time Required for a 1.0 PSIG Pressure Drop" in the Uni-Bell PVC Pipe Association "Recommended Practice For Low-Pressure Air Testing of Installed Sewer Pipe".

Before pressure is applied to the line all connections shall be firmly plugged. Before the test period starts, the air shall be given sufficient time to cool to ambient temperature in the test section.

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If the test section is below groundwater, the test pressure shall be increased an amount sufficient to compensate for groundwater hydrostatic pressure; however, the test pressure shall not exceed 10 PSI.

The pressure test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the Superintendent prior to testing.

Section 505 G - Vacuum Testing Alternative

In lieu of hydrostatic testing (exfiltration or infiltration), vacuum testing may be employed for testing of sewer lines and manholes. Sewer lines and manholes shall be tested separately. All sewer lines to be tested shall be cleaned and flushed, and shall have been backfilled, prior to testing. The vacuum test shall be based on the time, measured in seconds, for the vacuum to decrease from 10 inches of mercury to 9 inches of mercury for manholes, and from 7 inches of mercury to 6 inches of mercury for sewers.

Acceptance of manholes is based on the following:

| Manhole Depth  | Manhole Diameter | Time to Drop 1" Hg<br>(10" to 9") |
|----------------|------------------|-----------------------------------|
| 10 ft or less  | 4 ft             | 120 seconds                       |
| 10 ft to 15 ft | 4 ft             | 150 seconds                       |
| 15 ft to 25 ft | 4 ft             | 180 seconds                       |

For 5 ft diameter manholes, add 30 seconds to the times above.  
For 6 ft diameter manholes, add 60 seconds to the times above.

If the test on the manhole fails (the time is less than that tabulated above), necessary repairs shall be made and the vacuum test repeated, until the manhole passes the test.

Acceptance of sewers (7" Hg to 6" Hg) is based on the time tabulated in the "Specification Time Required for a 0.5 PSIG Pressure Drop" in the Uni-Bell PVC Pipe Association "Recommended Practice For Low-Pressure Air Testing of Installed Sewer Pipe".

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The vacuum test gauge shall have been recently calibrated, and a copy of the calibration results shall be made available to the Superintendent prior to testing.

Section 506A - Force Mains

Force mains serving sewage lifting devices, such as grinder pumps and pump stations, shall be designed in accordance with Section 501. Additional design requirements are:

(1) Force main pipe material shall be:

(a) Ductile Iron Pipe

Pipe shall conform to ANSI A21.51. The minimum wall thickness shall be Class 52 (ANSI A21.50). The pipe shall be clearly marked with either "D" or "DUCTILE". Fittings shall conform to ANSI A21.10.

Pipe and fittings shall be furnished with push-on joints conforming to ANSI A21.11.

Pipe and fittings shall be cement mortar lined and have an internal and external bituminous seal coating.

(b) Polyvinyl Chloride (PVC) Plastic Pipe

Pipe shall conform to ASTM D2241. Materials used in the manufacture of PVC pipe shall meet ASTM c1784. The minimum wall thickness shall be SDR-21. Fittings shall conform to ASTM D2241. Joints and gaskets shall conform to ASTM D2241, D1869, and F477.

(c) Other pipe materials

Other pipe materials require prior written approval of the Superintendent before being installed.

(2) Trenching, bedding, and backfilling shall be in accordance with Section 503 C.

(3) Joint preparation and assembly shall be in accordance with the manufacturer's written instructions.

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(4) Anchorages, concrete blocking, and/or mechanical restraint shall be provided when there is a change of direction of 7-1/2 degrees or greater.

(5) Drain valves shall be placed at low points.

(6) Automatic air relief valves shall be placed at high points and at 400 ft intervals, on level force main runs.

(7) Air relief and drain valves shall be suitably protected from freezing.

(8) When the daily average design detention time, in the force main, exceeds 20 minutes, the manhole and sewer line receiving the force main discharge or the sewage shall be treated so that corrosion of the manhole and the exiting line are prevented. The corrosion is caused by sulfuric acid biochemically produced from hydrogen sulfide anaerobically produced in the force main.

(9) The force main shall terminate, in the receiving manhole, at a PVC plastic sewer pipe "T". The vertical arms of the "T" shall be twice the diameter of the force main. The upper arm shall be at least 4 feet long; the lower arm shall terminate in a PVC plastic sewer pipe 90 degree elbow in a flow channel directed to the manhole exit pipe. The "T" and its arms shall be securely fastened to the inside surface of the manhole wall using corrosion resistant anchors.

Section 506B - Force Main Testing

All force mains shall be subjected to hydrostatic pressure of 150 percent of the normal operating pressure. The duration of the test, at pressure, shall be at least 2 hours. Before conducting the test, the pipe shall be filled with water and all air shall be expelled. During the test, water shall be added, as needed, to maintain the test pressure. The amount of water added shall be recorded so as to calculate leakage. Leakage shall not exceed 25 gallons per day per mile per inch nominal pipe diameter. During the test, the owner and the Superintendent shall walk the route of the force main and examine

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the exposed pipe and the ground covering any backfilled pipe to discover leaks. Leakage in excess of that specified above shall be corrected with new material at the owner's expense and the test repeated. Any observed leaks shall be repaired at the owner's expense.

Section 507 - Final Acceptance and Warranty/Surety

All sanitary sewers and extensions to sanitary sewers constructed at the applicant's expense, after final approval and acceptance by the Superintendent, and concurrence by the Village of Carthage Board, shall become the property of the Village of Carthage, and shall thereafter be operated and maintained by the Village of Carthage. No sanitary sewer shall be accepted by the Village of Carthage until four (4) copies of as-built drawings have been so filed with the Superintendent and the Superintendent has approved the submitted drawings. Said sewers, after their acceptance by the Village of Carthage, shall be guaranteed against defects in materials or workmanship for one (1) year, by the applicant. The guarantee shall be in such form and contain such provision as deemed necessary by the Village of Carthage Board, secured by a surety bond or such other security as the Village of Carthage Board may approve.

Section 508 - Liability Insurance Coverage During Construction Period

(1) All contractors engaged in connecting house laterals with sanitary sewers, who perform any work within the Right of Way of any highway, shall file a bond in the amount of Five Thousand Dollars (\$5,000.00) with the Village of Carthage Clerk to indemnify the Village of Carthage against loss, cost, damage or expense sustained or recovered on account of any negligence, omission or act of the applicant for such a permit, or any of his, or their agents arising or resulting directly or indirectly by reason of such permit or consent, or of any act, construction or excavation done, made or permitted under authority of such permit or consent. All bonds shall contain a clause that permits given by the Village of Carthage may be revoked at any time for just cause.

(2) Before commencing work, the above contractor shall file

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insurance certificates with the Village of Carthage Clerk for the following:

- (a) Workman's Compensation and Employer's Liability Insurance as required by the laws of the State covering the contractor;
- (b) Personal Injury Liability having limits of not less than \$500,000 each occurrence and \$500,000 aggregate (completed operations/products, personal injury);
- (c) Property Damage Liability having limits of not less than \$500,000 for all damages arising during the life of the contract; and shall include, but not be limited to, the following designated hazards:
  - i - Premises and Operations;
  - ii - Independent Contractors;
  - iii - Completed operations and products;
  - iv - Property Damage; and
  - v - Explosions, collapse and underground;
- (d) Comprehensive automobile liability (including non-owned and hired automobiles) having limits of not less than:

|                                        |           |
|----------------------------------------|-----------|
| i - Bodily injury - each person        | \$300,000 |
| each occurrence                        | \$500,000 |
| ii - Property damage - each occurrence | \$500,000 |
- (e) Business Excess Liability Insurance in the amount of \$2,000,000.
- (f) All insurance policies must provide for five (5) business days notice to the Village of Carthage before cancellation and must cover all liabilities of the Village of Carthage and be in a form approved by the Village of Carthage Board and be in a satisfactory form approved by the Board.

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- (g) The minimum insurance limits stated above shall be subject to periodic review by the Village of Carthage Board and adjustments made, by resolution, as appropriate.
- (3) Where it is necessary to enter upon or excavate any highway or cut any pavement, sidewalk or curbing, permission must be obtained from the Superintendent of Highways if a Village of Carthage Highway is involved, from the County Department of Public Works if a County Highway is involved, and/or the New York State Department of Transportation if a State Highway is involved.

END OF ARTICLE 5

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Article 6

BUILDING LATERALS, STREET LATERALS  
CONNECTIONS, and FEES

- Section 601 A - Permit Required for Sewer Connections
- Section 601 B - Inflow/Infiltration Prohibited
- Section 602 - Sewer Lateral Permits
- Section 603 A - New Building Laterals
- Section 603 B - Laterals Serving Several Buildings
- Section 603 C - Laterals Serving Complexes
- Section 603 D - Dry Sewers
- Section 604 - Using Existing Building Laterals
- Section 605 - Lateral Pipe Materials
- Section 606 A - Street Lateral to Public Sewer Connection
- Section 606 B - Future Connection Locations; As-Built Drawings
- Section 606 C - Special Manhole Requirements
- Section 607 - Laterals At and Near Buildings
- Section 608 - Sewage Lifting
- Section 609 - Lateral Pipe Installation
- Section 610 A - Watertight Joints
- Section 610 B - Cast Iron Pipe Poured Joints
- Section 610 C - Cast Iron Push Joints
- Section 610 D - PVC Push Joints
- Section 611 A - Building Lateral/Street Lateral Connection
- Section 611 B - Cleanout Repair/Replacement
- Section 611 C - Street Lateral Replacement; Ownership
- Section 612 - Testing
- Section 613 A - Connection Inspection
- Section 613 B - Trench Inspections
- Section 614 - Public Safety Provisions Required;  
                    Restoration of Disturbed Areas
- Section 615 - Interior Clean-Out
- Section 616 - Costs Borne by Owner

Section 601 A - Permit Required for Sewer Connections

No unauthorized person shall uncover, make any connection with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the Superintendent.

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Section 601 B - Inflow/Infiltration Prohibited

No person shall discharge or cause to be discharged any storm cooling water or unpolluted industrial waters to any sanitary sewer. Swimming pool drains shall not be connected to any sanitary sewer.

Section 602 - Sewer Lateral Permits

There shall be two classes of sewer lateral permits:

- (1) For residential, commercial, and institutional service,
- (2) For service to establishments producing industrial wastes.

In either case, a permit application shall be submitted to the Superintendent. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent, in the judgement of the Superintendent. A fee, established by Section 1202, shall accompany the application.

Section 603 A - New Building Laterals

A separate and independent building lateral shall be provided for every building requiring sanitary facilities. When, however, there is a building behind a front building, the second building may use the front building's building lateral, if there is no other way to provide sanitary service to the back building.

New street laterals and/or building laterals shall not go under building basements. In like fashion, a building shall not be constructed over an existing lateral; the lateral shall be relocated after the Superintendent has approved plans showing the relocation. If relocation is not physically possible then the lateral shall be

- (1) exposed and totally encapsulated in not less than three inches of concrete, or
- (2) exposed and walled and the building rooms above positively ventilated outdoors.

All existing manholes in or under the basement shall be sealed air-tight in a manner acceptable to the Superintendent. No new manholes shall be constructed on the portion of the lateral under the building.

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Section 603 B -Laterals Serving Several Buildings

When building laterals are to serve multiple dwelling structures, the building lateral shall be sized in accordance with the metered water use and with sound professional engineering judgement.

Section 603 C - Laterals Serving Complexes

Where a lateral sewer is to serve a complex of industrial, commercial, institutional, or dwelling structures, special design of the building lateral system shall be required. Such lateral sewer shall be connected to the public sewer through a manhole. The Superintendent shall determine if and where this connection to the public sewer is required. If required, a new manhole shall be installed in the public sewer pursuant to Section 503 D and 1007 and the lateral connection made and tested as directed by the Superintendent. Plans and specifications shall be prepared and submitted for approval pursuant to this Law.

Section 603 D - Dry Sewers

Dry Sewers shall be designed and installed in accordance to this Law.

Section 604 - Using Existing Building Laterals

Existing building laterals may be used in connection with new buildings only when they are found, on examination by the Superintendent, to meet all requirements of this local Law.

Section 605 - Lateral Pipe Materials

Building and street lateral pipe materials shall be one of the following:

(1) Tar-coated, service grade, cast iron soil pipe conforming to ASTM Specification A-74, "Cast Iron Pipe and Fittings". All dimensions, weight and markings of the pipe shall conform to the requirements of ANSI, Designation A112.5.1, except spigot ends shall be "plain end", if gasket joints are used.

(2) Polyvinyl chloride (PVC) pipe and fittings conforming to ASTM Specification D-3034-73, "SDR-35 Polyvinyl Chloride (PVC) Sewer Pipe and Fittings". All pipe shall be suitable for gravity sewer service. Provisions shall be made for contraction and

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expansion at each joint with a rubber ring. The bell shall consist of an integral wall section stiffened with two PVC retainer rings which securely lock the solid cross-section ring into position. Minimum "Pipe Stiffness" (F/Y) at five percent (5%) deflection shall be 46 PSI when tested in accordance with ASTM Specification D-2412.

Any part of the building or street lateral that is located within five (5) feet of a water main or water service shall be constructed of cast iron soil pipe. Cast iron soil pipe may be required by the Superintendent where the building or street lateral is likely to be damaged by tree roots. If installed on fill or unstable ground, the building or street lateral shall be of cast iron soil pipe, although other pipe material may be permitted if such pipe is uniformly supported on a poured concrete cradle approved by the Superintendent. The distance between consecutive joints, as measured along the centerline of the installed pipe, shall not be less than ten (10) feet, except under abnormal circumstances, in which case this dimension may be diminished, if approved by the Superintendent. The size and slope of building and street laterals shall be subject to approval by the Superintendent, but in no event shall the internal pipe diameter be less than 4 inches, nor shall the pipe slope be less than 1/4 inch per foot.

Section 606 A - Street Lateral to Public Sewer Connection

At the point of connection of a street lateral to a main sewer, a standard wye fitting and sufficient one-eighth (45 degree) bend fittings shall be used. The wye fittings shall be installed so that flow in the "arm" shall transition smoothly into the flow in the public sewer. No lateral connection shall be made to the public sewer which permits the flow into the public sewer from the lateral to enter at right angles.

Section 606 B - Future Connection Locations; As-Built Drawings

The street lateral, including the wye and eighth bend fittings, shall be connected to the main sewer at the time of constructing the main sewer, for each proposed lot for either immediate or future development. Laterals installed for future development shall be fitted a standard plug approved for use by the Superintendent. All sewer connections shall be via a properly installed saddle on the main sewer pipe. No portion of the lateral pipe shall protrude into the main sewer pipe. The location of all lateral connections shall be field marked with a 2 inch by 6 inch corrosion and rot resistant board. The

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marker board shall extend from the depth of the lateral to a minimum of two (2) feet above grade. The location of all lateral connections shall be indicated on a drawing and four (4) copies of this drawing, showing the as-built location of these connections, shall be furnished to the Superintendent. A refundable deposit shall be placed with Village of Carthage to assure receipt of these as-builts. The deposit shall be placed when application is made; the amount of the deposit shall be \$100 per sheet of plans showing locations of lateral connections. No sanitary sewer shall be accepted by Village of Carthage until four (4) copies of this record drawing have been so filed with the Superintendent and the Superintendent has approved the submitted drawings.

Section 606 C - Special Manhole Requirements

When any street lateral is to serve a school, hospital, or similar institution, or public housing, or is to serve a complex of industrial or commercial buildings, or which, in the opinion of the Superintendent, will receive wastewater or industrial wastes of such volume or character that frequent maintenance of said building or street lateral is anticipated, then such street lateral shall be connected to the public sewer through a manhole. The Superintendent shall determine if and where this type of connection to the public sewer is required. Connections to existing manholes shall be made as directed by the Superintendent. If required, a new manhole shall be installed in the public sewer pursuant to Sections 504 and 1007, and the lateral connection made thereto as directed by the Superintendent.

Section 607 - Lateral At and Near Buildings

Whenever possible, the building lateral shall be brought to the building at an elevation below the basement floor. Building laterals laid parallel to a bearing wall shall not be installed closer than three (3) feet to such wall. The building lateral shall be laid at uniform grade and in straight alignment insofar as possible. Changes in direction shall be made only with properly curved pipe and fittings. Changes of direction of 90 degrees or greater shall be made with a cleanout which extends to grade, terminating in a terminal box set in concrete. The ends of all building or street laterals, which are not connected to the interior plumbing of the building, for any reason, shall be sealed against infiltration by a suitable stopper, plug, or by other approved means.

Section 608 - Sewage Lifting

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In all buildings in which any building drain is too low to permit gravity flow to the public sewer, wastewater carried by such drain shall be lifted by mechanical means and discharged to the building lateral, on approval of the Superintendent.

Section 609 - Lateral Pipe Installation

All excavations required for the installation of a building or street lateral shall be open trench work unless otherwise approved by the Superintendent. Pipe laying and backfilling, regardless of pipe material used, shall be performed in general accordance with paragraphs 3 through 6 of ASTM Specification C-12, except that trench width, measured at the top of the installed pipe, shall not exceed the outside pipe diameter plus 14 inches and, except that no backfill shall be placed until the work has been inspected. The depth of cover over the pipe shall be sufficient to afford protection from frost, but in any case such depth shall not be less than four (4) feet.

Section 610 A - Watertight Joints

All joints and connections shall be made watertight.

Section 610 B - Cast Iron Pipe Poured Joints

Poured joints for cast iron pipe shall be firmly packed with oakum or hemp, and the annulus filled with an approved compound not less than 1 inch deep. The said compound shall be run in with a single scouring, and caulked tight, if appropriate for the compound used. No paint, varnish, or other coatings shall be permitted on the jointing material until after the joint has been tested and approved. The transition joint between cast iron pipe and other pipe materials shall be made with special adapters and jointing materials approved by the Superintendent. If such joints are hot-poured, the material shall not soften sufficiently to destroy the effectiveness of the joint when subjected to a temperature of 160 degrees F, nor be soluble in any of the wastes carried by the lateral.

Section 610 C - Cast Iron Push Joints

Pre-molded gaskets may be used for hub and plain end cast iron pipe joints and joints with fittings, if approved by the Superintendent. The gasket shall be a neoprene compression-type unit which provides a positive seal in the assembled joint. The gasket shall be pre-molded, one-piece unit, designed for joining the cast iron hub and plain end soil pipe and fittings. The assembled joint

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shall be sealed by compression of the gasket between the exterior surface of the spigot and the interior surface of the hub. The joint shall be assembled following the manufacturer's recommendations using acceptable lubricant and special pipe-coupling tools designed for that purpose. The plain spigot end shall be forced into the hub end of the pipe for the full depth of the hub itself. Lubricant shall be a bland, flax-base, non-toxic material, and shall not chemically attack the gasket material.

Section 610 D - PVC Push Joints

Joints for PVC sewer pipe shall follow the manufacturer's recommendations, using properly designed couplings and rubber gaskets pursuant to the published information relating thereto, and conforming to the applicable ASTM specification identified in Section 605.

Section 611 A - Building Lateral/Street Lateral Connection

(1) The connection of the building lateral to an existing street lateral shall be made at the property line. Except as provided under Section 502, if a street lateral has not previously been provided, the street lateral will be constructed from the existing public sewer to the property line, by a licensed plumber, at the owner's expense. The street lateral shall be installed with a properly sealed and covered clean-out to grade located at the property line. The clean-out shall terminate in a metal box imbedded in concrete.

(2) The cost of constructing the street lateral from the existing public sewer to the property line shall be at the property owner's expense; all subsequent costs and expense incidental to the installation and connection of the building lateral shall also be borne by the owner.

(3) The property owner shall indemnify the Village of Carthage from any loss or damage that may directly or indirectly be occasioned by the installation of the building lateral.

(4) It shall be the responsibility of the property owner to maintain, repair, or replace the building lateral, as needed.

(5) The method of connection of the building lateral to the street lateral will be dependent upon the type of sewer pipe material, and, in all cases, shall be approved by the Superintendent. After installation of the street lateral has

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been approved by the Superintendent, the new street lateral shall become the property of the Village of Carthage. Any subsequent repairs to the new street laterals shall be made by the Village of Carthage at the Village of Carthage's expense.

Section 611 B - Cleanout Repair/Replacement

If, in the judgement of the Superintendent, it is determined that a building lateral, without a property line clean-out, needs repair or replacement, the Village of Carthage may install a clean-out at the property line, at the property owner's expense, such that the street lateral can be maintained independently of the building lateral.

Section 611 C - Street Lateral Replacement; Ownership

Any existing street lateral which, upon examination by the Superintendent, is determined to be in need of replacement will be replaced with a new street lateral with a property line clean-out. The replacement street lateral shall be constructed by a licensed plumber. The cost of constructing the replacement street lateral and clean-out shall be at the property owner's expense. Once the replacement street lateral and clean-out have been constructed and approved by the Superintendent, the new street lateral shall become the property of the Village of Carthage. Any repairs to new street laterals shall be made by the Village of Carthage at the Village of Carthage's expense.

Section 612 - Testing

The street lateral, building lateral, or the combined lateral shall be tested for infiltration/exfiltration by

- (a) any full pipe method described in Section 505, or
- (b) by a suitable joint method, with the prior written approval of the Superintendent.

Section 613 A - Connection Inspection

The applicant for the building lateral permit shall notify the Superintendent when the building lateral is ready for inspection and connection is to be made to the street lateral. The connection shall be made under the supervision of the Superintendent.

The applicant for the street lateral permit shall notify the Superintendent when the street lateral is ready for inspection and connection is to be made to the main sewer. The connection shall be made under the supervision of the Superintendent.

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Section 613.B - Trench Inspections

When trenches are excavated for the laying of building lateral pipes or for laying of street lateral pipes, such trenches shall be inspected by the Superintendent. Before the trenches are backfilled, the person performing such work shall notify the Superintendent when the laying of the building lateral is completed, and no backfilling of trenches shall begin until approval is obtained from the Superintendent.

Section 614 - Public Safety Provisions Required; Restoration of Disturbed Areas

All excavations for constructing building laterals shall be adequately protected with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed, in the course of the work, shall be restored in a manner satisfactory to the Superintendent. When installation requires disturbance of paved public roads and shoulders, restoration shall involve backfilling to road grade. Shortly thereafter the Village of Carthage Department of Public Works (DPW) shall complete road and shoulder restoration to the Village of Carthage Standards. The cost for such final road and shoulder restoration by the DPW shall be included with the fees paid with the application for the permit required in Section 602.

Section 615 - Interior Clean-Out

An interior clean-out fitting shall be provided for each building lateral at a readily accessible location, preferably just inside the basement wall. The fitting shall contain a 45-degree branch with removable plug or test tee, and so positioned that sewer cleaning equipment can be inserted therein to clean the building lateral.

The cleanout diameter shall be no less than the building lateral diameter.

Section 616 - Costs Borne by Owner

All costs associated with the provisions of this Article shall be borne by the property owner unless specifically stated or agreed to be a cost borne by the Village of Carthage. The property owner shall indemnify the Village of Carthage from any loss or damage that may be directly or indirectly occasioned by the installation of the building and street laterals, and connections and appurtenances.

END OF ARTICLE 6

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ARTICLE 7

INFLOW

Section 701 - New Inflow Sources Prohibited  
Section 702 - Existing Inflow Sources Disconnected  
Section 703 - Existing Inflow Sources Disconnected  
When Property Sold  
Section 704 - No Re-connection of Inflow Source Allowed  
Section 705 - Charges for Inflow

Section 701 - New Inflow Sources Prohibited

No connections shall be made to a sanitary or to a combined sewer which connections are intended to discharge inflow. Such prohibited connections include, but are not limited to, footing drains, roof leaders, roof drains, cellar drains, sump pumps, catch basins, uncontaminated cooling water discharges, or other sources of inflow.

Section 702 - Existing Inflow Sources Disconnected

For properties where separate storm sewers are available within 100 feet of the property line or where, in the judgement of the Superintendent, sufficient natural drainage is available, connections which contribute inflow to the sanitary sewers must be disconnected in a fashion approved by the Superintendent, prior to the sale of the property.

Section 703 - Existing Inflow Sources Disconnected When Property Sold

Upon notice from the Tax Assessor, the Superintendent shall inspect any newly sold property for the purpose of determining if storm sewers or natural drainage is available, and, if so, if all connections which contribute inflow have been disconnected.

Section 704 - No Re-connection of Inflow Source Allowed

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It shall be a willful violation of this Law for any person to reconnect any inflow source which has been disconnected pursuant to this Article.

Section 705 - Charges for Inflow

The Superintendent is enabled to take whatever action is necessary to determine the amount of inflow including the requirement for installation of a control manhole. The property from which the inflow originated shall be billed for inflow according to Article 12, however, the Village of Carthage Board may cause a surcharge at a rate not to exceed five (5) times that for normal sewage volume charge.

END OF ARTICLE 7

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(ARTICLE 8

TRUCKED OR HAULED WASTE

- Section 801 - Licenses and Application
- Section 802 - Concurrent Requirements
- Section 803 - Dumping Location and Timing
- Section 804 - Notification of Dumping

Section 801 - Licenses and Application

The discharge of trucked or hauled wastes into the Village of Carthage sewer system and public sewers tributary thereto will be permitted only with the written approval (license) of the Superintendent. Applicants for such license shall apply on a form provided by the Superintendent. These forms may require information such as vehicle specifications, vehicle license number, vehicle color, NYSDEC permits issued under 6 NYCRR Part 364, approximate annual septage volume expected, service area, and any other information that the Superintendent may require, to determine whether the trucked or hauled wastes could adversely impact the PDTW. The application shall be accompanied by a fee prescribed by the Superintendent, not to exceed \$100.

The licensee of trucked or hauled wastes will also be charged a fee for each dumping, in accordance with Article 12. The dumping fee shall be paid prior to dumping.

Section 802 - Concurrent Requirements

The applicant for a license to truck or haul wastes shall be the owner of the vehicle or vehicles to be used for such discharge. Any false or misleading statement, in any license application, shall be grounds for invalidating the license. All licenses, issued by the Superintendent, for this purpose, shall be for one (1) year. The licensee shall also be duly permitted by the NYSDEC under 6 NYCRR Part 364 ("364 permit"). If, for any reason, the 364 permit is revoked, the

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364 permit lapses or becomes invalid, then the license issued under this Article shall become invalid immediately. All acts performed in connection with the license shall be subject to the inspection and regulations, as established by the Superintendent, the terms and conditions of the license and all local and general laws, ordinances, and regulations which are now or may come into effect, and such licensee may be suspended or revoked, at any time, by the Superintendent for willful, continued, or persistent violation thereof.

Section 803 - Dumping Location and Timing

The Superintendent may require discharging at only certain locations within the POTW, and only at certain times, and on only certain days of the week, or seasons of the year as shall be stated on said license or as may be relocated by the Superintendent, after appropriate notice. The time and conditions for permissible discharge shall be as set forth on the license, or as may be revised by the superintendent, after appropriate notice.

Section 804 - Notification of Dumping

Each discharge of trucked or hauled wastes shall be made only with the approval of the Superintendent. The Superintendent may require inspection, sampling, and analysis of each load prior to the discharge of a load. Any extra costs associated with such inspection, sampling, and analysis shall be paid by the licensee.

END OF ARTICLE 8

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ARTICLE 9

DISCHARGE RESTRICTIONS

Section 901 - Pretreatment Standards  
Section 902 - General Prohibitions  
Section 903 - Concentration Based Limitations  
Section 904 - Mass Discharge Based Limitations  
Section 905 - Modification of Limitations  
Section 906 - Dilution  
Section 907 - Grease, Oil, and Sand Interceptors

Section 901 - Pretreatment Standards

All users of the Village of Carthage POTW will comply with all standards and requirements of the Act and standards and requirements promulgated pursuant to the Act, including but not limited to 40 CFR Parts 406 - 471.

Section 902 - General Prohibitions

No user shall contribute or cause to be contributed, in any manner or fashion, directly or indirectly, any pollutant or wastewater which will interfere with the operation or performance of the POTW. These general prohibitions apply to all such users of a POTW whether or not the user is subject to National Categorical Pretreatment Standards, or any other National, State, or Local Pretreatment Standards or Requirements.

Without limiting the generality of the foregoing, a user may not contribute the following substances to the POTW:

- (1) Any solids, liquids, or gases which, by reason of their nature or quantity, are or may be sufficient, either alone or by interaction with other substances, to cause a fire or an explosion or be injurious, in any way, to the POTW, or to the

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operation of the POTW. At no time shall both of two successive readings on a flame type explosion hazard meter, at the point of discharge into the system (or at any other point in the system) be more than 25 % nor any single reading be more than 40 % of the lower explosive limit (LEL) of the meter. Unless explicitly allowable by a written permit, prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, carbides, hydrides, and sulfides, and any other substance which the Village of Carthage, the State, or the EPA has determined to be a fire hazard, or hazard to the POTW.

(2) Solid or viscous substances which may cause obstruction to the flow in a sewer or otherwise interfere with the operation of the wastewater treatment facilities. Unless explicitly allowable by a written permit, such substances include, but are not limited to, grease, garbage with particles greater than one-half (1/2) inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar asphalt residues, residues from refining or processing fuel or lubricating oil, mud, or glass or stone grinding or polishing wastes.

(3) Any wastewater having a pH less than 5.0 or greater than 10.0, unless the POTW was specifically designed to manage such wastewater, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or POTW personnel.

(4) Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants (including heat), to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW, or to exceed the limitation set forth in a Categorical Pretreatment Standard.

A toxic pollutant shall include, but not be limited to, any

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pollutant identified pursuant to Section 307(A) of the Act.

(5) Any noxious or malodorous solids, liquids, or gases which either singly or by interaction with other wastes are sufficient to create a public nuisance or a hazard to life or are sufficient to prevent entry into the sewers for their maintenance or repair.

(6) Oils and grease - Any commercial, institutional, or industrial wastes containing fats, waxes, grease, or oils which become visible solids when the wastes are cooled to ten (10) degrees centigrade (50 degrees fahrenheit); any petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin, in excess of 100 mg/l or in amounts that will cause interference or pass through.

(7) Any wastewater which will cause interference or pass through.

(8) Any wastewater with objectionable color which is not removed in the treatment process, such as, but not limited to, dye wastes, and vegetable tanning solutions.

(9) Any solid, liquid, vapor, or gas having a temperature higher than 65 degrees C (150 degrees F); however, such materials shall not cause the POTW treatment plant influent temperature to be greater than 40 degrees C (104 degrees F). The Superintendent reserves the right, in certain instances, to prohibit or limit the discharge of wastes whose maximum temperatures are lower than 65 degrees C.

(10) Unusual flow rate or concentration of wastes, constituting slugs, except by Industrial Wastewater Permit.

(11) Any wastewater containing any radioactive wastes except as approved by the Superintendent, and in compliance with applicable State and Federal regulations.

(12) Any wastewater which causes a hazard to human life or which creates a public nuisance, either by itself or in combination, in any way, with other wastes.

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- (13) Any wastewater with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR Part 261.21.
- (14) Any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

Section 903 - Concentration Based Limitations

No person shall discharge, directly or indirectly, into the POTW, wastewater containing any of the following substances in concentrations exceeding those specified below on either a daily or an instantaneous basis, except by permit or as provided for in Section 903. Concentration limits are applicable to wastewater effluents at the point just prior to discharge into the POTW ("end of pipe" concentrations).

| SUBSTANCE<br>(1)       | EFFLUENT CONCENTRATION LIMIT -mg/l   |                                              |  |
|------------------------|--------------------------------------|----------------------------------------------|--|
|                        | ALLOWABLE<br>AVERAGE<br>DAILY<br>(2) | ALLOWABLE<br>MAXIMUM<br>INSTANTANEOUS<br>(3) |  |
| Arsenic . . . . .      | 0.09 . . . . .                       | 0.18 . . . . .                               |  |
| Cadmium . . . . .      | 0.90 . . . . .                       | 1.80 . . . . .                               |  |
| Chromim(tot) . . . . . | 0.90 . . . . .                       | 1.80 . . . . .                               |  |
| Copper . . . . .       | 1.17 . . . . .                       | 2.34 . . . . .                               |  |
| Cyanide . . . . .      | 0.13 . . . . .                       | 0.26 . . . . .                               |  |
| Lead . . . . .         | 0.09 . . . . .                       | 0.18 . . . . .                               |  |
| Mercury . . . . .      | 0.09 . . . . .                       | 0.18 . . . . .                               |  |
| Nickel . . . . .       | 0.90 . . . . .                       | 1.80 . . . . .                               |  |
| Silver . . . . .       | 0.23 . . . . .                       | 0.46 . . . . .                               |  |
| Zinc . . . . .         | 0.10 . . . . .                       | 0.20 . . . . .                               |  |

- (1) All concentrations listed for metallic substances shall be as "total metal", which shall be defined as the value measured in a sample acidified to a pH value of 2 or less, without prior filtration.

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(2) As determined on a composite sample taken from the User's daily discharge over a typical operational and/or production day.

(3) As determined on a grab sample taken from the User's discharge at any time during the daily operational and/or production period.

(4) Other substances which may be limited are:

antibiotics

chemical compounds which, upon acidification, alkalinization, oxidation or reduction, in the discharge or after admixture with wastewater and its components in the POTW produce toxic, flammable, or explosive compounds

pesticides, including algicides, fungicides, herbicides, insecticides, rodenticides

polyaromatic hydrocarbons

viable pathogenic organisms from industrial processes or hospital procedures

Section 904 - Mass Discharge Based Limitations

At no time shall the influent to the POTW contain quantities in excess of those specified below:

ALLOWABLE INFLUENT LOADING

| <u>SUBSTANCE</u>        | <u>AVERAGE DAILY (POUNDS PER DAY)</u> |
|-------------------------|---------------------------------------|
| Arsenic . . . . .       | 3.01                                  |
| Cadmium . . . . .       | 30.02                                 |
| Chromium(tot) . . . . . | 30.02                                 |
| Copper . . . . .        | 38.49                                 |
| Cyanide(tot) . . . . .  | 4.11                                  |
| Lead . . . . .          | 3.01                                  |
| Mercury . . . . .       | 3.01                                  |
| Nickel . . . . .        | 30.02                                 |
| Silver . . . . .        | 7.51                                  |
| Zinc . . . . .          | 3.20                                  |

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Section 1001 - Wastewater Discharge Reports

As a means of determining compliance with this Law, with applicable SPDES permit conditions, and with applicable State and Federal law, each industrial user shall be required to notify the Superintendent of any new or existing discharges to the POTW by submitting a completed Industrial Chemical Survey (ICS) form and a completed Industrial Wastewater Survey (IWS) form to the Superintendent. The Superintendent may require any user discharging wastewater into the POTW to file wastewater discharge reports and to supplement such reports as the Superintendent deems necessary. All information shall be furnished by the user in complete cooperation with the Superintendent.

Section 1002 - Notification to Industrial Users

The Superintendent shall, from time to time, notify each industrial user of applicable Pretreatment Standards, and of other applicable requirements under Section 204(B) and Section 405 of the Clean Water Act, and Subtitles C and D of RCRA.

Section 1003 A - Wastewater Discharges

No Significant Industrial User shall discharge wastewater to the POTW without having a valid Wastewater Discharge Permit, issued by the Superintendent. Significant Industrial Users shall comply fully with the terms and conditions of their permits in addition to the provisions of this Law. Violation of a permit term or condition is deemed a violation of this Law.

Section 1003 B - Wastewater Discharge Permits Required For Significant Industrial Users

All Significant Industrial Users proposing to connect to or to discharge to the POTW shall obtain a Wastewater Discharge Permit before connecting to or discharging to the POTW. Existing significant industrial users shall make application for a Wastewater Discharge Permit within 30 days after the effective date of this Law, and shall obtain such a permit within 90 days after making application.

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ARTICLE 10

DISCHARGE PERMITS AND PRETREATMENT REQUIREMENTS

- Section 1001 - Wastewater Discharge Reports
- Section 1002 - Notification to Industrial Users
- Section 1003 A - Wastewater Discharges
- Section 1003 B - Wastewater Discharge Permits Required For Significant Industrial Users
- Section 1003 C - Other Industrial Users
- Section 1003 D - Discharge Permits to Storm Sewers Not Authorized
- Section 1004 A - Application for Wastewater Discharge Permits
- Section 1004 B - Permit Modifications
- Section 1004 C - Permit Conditions
- Section 1004 D - Permit Duration
- Section 1004 E - Permit Reissuance
- Section 1004 F - Permit Transfer
- Section 1004 G - Permit Revocation
- Section 1004 H - Public Notification
- Section 1005 - Reporting Requirements for Permittee
- Section 1006 - Flow Equalization
- Section 1007 - Monitoring Stations (Control Manholes)
- Section 1008 - Proper Design and Maintenance of Facilities and Monitoring Stations
- Section 1009 - Vandalism, Tampering with Measuring Devices
- Section 1010 - Sampling and Analysis
- Section 1011 - Accidental Discharges; SPCC Plan
- Section 1012 - Posting Notices
- Section 1013 - Sample Splitting
- Section 1014 - Access to Information
- Section 1015 A - Access to Property
- Section 1015 B - Access to Easements
- Section 1015 C - Liability of Property Owner
- Section 1016 - Special Agreements

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END OF ARTICLE 9

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POTW's SPDES permit.

- (3) The POTW sludge will be rendered unacceptable for disposal or reuse as the Village of West Carthage desires, as a result of discharge of wastewaters at the above prescribed concentration limitations.
- (4) Municipal employees or the public will be endangered, or
- (5) Air pollution and/or groundwater pollution will be caused.

The limitations on wastewater strength or mass discharge shall be recalculated not less frequently than once every five (5) years. The results of these calculations shall be reported to the Village of West Carthage Board. This Law shall then be amended appropriately. Any issued industrial wastewater discharge permits, which have limitations, based directly on any limitations, which were changed, shall be revised and amended, as appropriate.

Section 906 - Dilution

Except where expressly authorized to do so by an applicable Pretreatment Standard, no user shall ever increase the use of process water or, in any other way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a Pretreatment Standard.

Dilution flow shall be considered to be inflow.

Section 907 - Grease, Oil, and Sand Interceptors

Grease, oil, and sand interceptors shall be provided, when, in the opinion of the Superintendent, they are necessary for the proper handling of wastewater containing excessive amounts of grease, flammable substances, sand, or other harmful substances; except that such interceptors shall not be required for private living quarters or living units. All interceptors shall be of type and capacity approved by the Superintendent and shall be so located to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned, and repaired regularly, as needed, by the owner, at his expense.

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|                        |                         |
|------------------------|-------------------------|
| Silver . . . . .       | 7.51                    |
| Zinc . . . . .         | 3.20                    |
| BOD . . . . .          | 10000.00                |
| Suspended Solids . . . | 9000.00                 |
| Flow . . . . .         | 4.0 Million gallons/day |

To assure that none of the above noted limitations are violated, the Superintendent shall issue permits to significant industrial users limiting the discharge of the substances noted above. Each permit shall restrict the discharge from each significant industrial user to a portion of the total allowable influent loading. In determining what portion of the total of each substance that each significant industrial user shall be allowed to discharge the superintendent shall consider: (1) the quantities of each substance that are uncontrollable because they occur naturally in wastewater, (2) the quantities of each substance that are anthropogenic but are nonetheless uncontrollable, (3) historical discharge trends, (4) past pollution control efforts of each significant industrial user as compared to other significant industrial dischargers of the same substance, (5) potential for growth in the POTW service area, (6) potential for more restrictive regulatory requirements to be placed on the POTW discharge or sludge disposal or sludge reuse method, and (7) treatability of the substance. The superintendent shall apply a minimum 15 % safety factor to be protective of the POTW.

Permits issued in accordance with this section may allow for discharges in excess of limitations set forth under section 902.

Section 905 - Modification of Limitations

Limitations on wastewater strength or mass discharge contained in this Law may be supplemented with more stringent limitations when, in the opinion of the Superintendent:

- (1) The limitations in this Law are not sufficient to protect the POTW.
- (2) The limitations in this Law are not sufficient to enable the POTW treatment plant to comply with applicable water quality standards or the effluent limitations specified in the

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(2) As determined on a composite sample taken from the User's daily discharge over a typical operational and/or production day.

(3) As determined on a grab sample taken from the User's discharge at any time during the daily operational and/or production period.

(4) Other substances which may be limited are:

antibiotics

chemical compounds which, upon acidification, alkalinization, oxidation or reduction, in the discharge or after admixture with wastewater and its components in the POTW produce toxic,

flammable, or explosive compounds

pesticides, including algicides, fungicides, herbicides, insecticides, rodenticides

polyaromatic hydrocarbons

viable pathogenic organisms from industrial processes or hospital procedures

Section 904 - Mass Discharge Based Limitations

At no time shall the influent to the POTW contain quantities in excess of those specified below:

ALLOWABLE INFLUENT LOADING

| <u>SUBSTANCE</u>        | <u>AVERAGE DAILY (POUNDS PER DAY)</u> |
|-------------------------|---------------------------------------|
| Arsenic . . . . .       | 3.01                                  |
| Cadmium . . . . .       | 30.02                                 |
| Chromium(tot) . . . . . | 30.02                                 |
| Copper . . . . .        | 38.49                                 |
| Cyanide(tot) . . . . .  | 4.11                                  |
| Lead . . . . .          | 3.01                                  |
| Mercury . . . . .       | 3.01                                  |
| Nickel . . . . .        | 30.02                                 |

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as "total metal", which shall be defined as the value measured in a sample acidified to a pH value of 2 or less, without prior filtration.

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any way, with other wastes.

(13) Any wastewater with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR Part 261.21.

(14) Any pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

Section 903 - Concentration Based Limitations

No person shall discharge, directly or indirectly, into the POTW, wastewater containing any of the following substances in concentrations exceeding those specified below on either a daily or an instantaneous basis, except by permit or as provided for in Section 903. Concentration limits are applicable to wastewater effluents at the point just prior to discharge into the POTW ("end of pipe" concentrations).

| SUBSTANCE<br>(1)                  | EFFLUENT CONCENTRATION LIMIT -mg/l   |                      |                      |
|-----------------------------------|--------------------------------------|----------------------|----------------------|
|                                   | ALLOWABLE<br>AVERAGE<br>DAILY<br>(2) | ALLOWABLE<br>MAXIMUM | INSTANTANEOUS<br>(3) |
|                                   |                                      |                      |                      |
| Arsenic . . . . . . . . . . . .   | 0.09 . . . . .                       | 0.18                 |                      |
| Cadmium . . . . . . . . . . . .   | 0.90 . . . . .                       | 1.80                 |                      |
| Chromium(tot) . . . . . . . . . . | 0.90 . . . . .                       | 1.80                 |                      |
| Copper . . . . . . . . . . . .    | 1.17 . . . . .                       | 2.34                 |                      |
| Cyanide . . . . . . . . . . . .   | 0.13 . . . . .                       | 0.26                 |                      |
| Lead . . . . . . . . . . . .      | 0.09 . . . . .                       | 0.18                 |                      |
| Mercury . . . . . . . . . . . .   | 0.09 . . . . .                       | 0.18                 |                      |
| Nickel . . . . . . . . . . . .    | 0.90 . . . . .                       | 1.80                 |                      |
| Silver . . . . . . . . . . . .    | 0.23 . . . . .                       | 0.46                 |                      |
| Zinc . . . . . . . . . . . .      | 0.10 . . . . .                       | 0.20                 |                      |

(1) All concentrations listed for metallic substances shall be

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ARTICLE 9

DISCHARGE RESTRICTIONS

Section 901 - Pretreatment Standards  
Section 902 - General Prohibitions  
Section 903 - Concentration Based Limitations  
Section 904 - Mass Discharge Based Limitations  
Section 905 - Modification of Limitations  
Section 906 - Dilution  
Section 907 - Grease, Oil, and Sand Interceptors

Section 901 - Pretreatment Standards

All users of the Village of West Carthage POTW will comply with all standards and requirements of the Act and standards and requirements promulgated pursuant to the Act, including but not limited to 40 CFR Parts 406 - 471.

Section 902 - General Prohibitions

No user shall contribute or cause to be contributed, in any manner or fashion, directly or indirectly, any pollutant or wastewater which will interfere with the operation or performance of the POTW. These general prohibitions apply to all such users of a POTW whether or not the user is subject to National Categorical Pretreatment Standards, or any other National, State, or Local Pretreatment Standards or Requirements.

Without limiting the generality of the foregoing, a user may not contribute the following substances to the POTW:

- (1) Any solids, liquids, or gases which, by reason of their nature or quantity, are or may be sufficient, either alone or by interaction with other substances, to cause a fire or an explosion or be injurious, in any way, to the POTW, or to the

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reconnect any inflow source which has been disconnected pursuant to this Article.

Section 705 - Charges for Inflow

The Superintendent is enabled to take whatever action is necessary to determine the amount of inflow including the requirement for installation of a control manhole. The property from which the inflow originated shall be billed for inflow according to Article 12, however, the Village of West Carthage Board may cause a surcharge at a rate not to exceed five (5) times that for normal sewage volume charge.

END OF ARTICLE 7

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ARTICLE 7

INFLOW

Section 701 - New Inflow Sources Prohibited  
Section 702 - Existing Inflow Sources Disconnected  
Section 703 - Existing Inflow Sources Disconnected  
When Property Sold  
Section 704 - No Re-connection of Inflow Source Allowed  
Section 705 - Charges for Inflow

Section 701 - New Inflow Sources Prohibited

No connections shall be made to a sanitary or to a combined sewer which connections are intended to discharge inflow. Such prohibited connections include, but are not limited to, footing drains, roof leaders, roof drains, cellar drains, sump pumps, catch basins, uncontaminated cooling water discharges, or other sources of inflow.

Section 702 - Existing Inflow Sources Disconnected

For properties where separate storm sewers are available within 100 feet of the property line or where, in the judgement of the Superintendent, sufficient natural drainage is available, connections which contribute inflow to the sanitary sewers must be disconnected in a fashion approved by the Superintendent, prior to the sale of the property.

Section 703 - Existing Inflow Sources Disconnected When Property Sold

Upon notice from the Tax Assessor, the Superintendent shall inspect any newly sold property for the purpose of determining if storm sewers or natural drainage is available, and, if so, if all connections which contribute inflow have been disconnected.

Section 704 - No Re-connection of Inflow Source Allowed

It shall be a willful violation of this Law for any person to

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( shall indemnify the Village of West Carthage from any loss or damage that may be directly or indirectly occasioned by the installation of the building and street laterals, and connections and appurtenances.

END OF ARTICLE 6